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EXAMINER

ZHU, RICHARD Z

ART UNIT	PAPER NUMBER
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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/757,283	Applicant(s) GRIESEMER ET AL.	
	Examiner RICHARD Z. ZHU	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement

1. Acknowledgement is made of applicant's amendment made on 08/08/2008. Applicant's submission filed has been entered and made of record.

Status of the Claims

2. Claims 1 and 3-48 are pending. All claims are "original" or "Previously presented".

Response to Applicant's Arguments

3. In response to applicant's argument presented from Page 8 – 12 including **Missing Element in Cited Combination**, the applicant challenge the examiner's understanding of biasing mechanism. In response, *Franz* was cited as analogous art used to describe how one skilled in the art would understand biasing mechanism and why a broad interpretation utilizing *Hideki* was reasonable. For the reasons stated in the previous office action, the examiner remained convinced that the scope of biasing mechanism is sufficiently met by the structure of *Hideki*. Therefore, the examiner agrees to disagree with the applicant.

To settle this debate, the examiner is incorporating the teachings of a spring in *Goshima* into the relevant rejections. Therefore, the issue is rendered moot. The examiner is also incorporating the teaching of a new reference to teach a scanner bed with a scanner lid to strengthen relevant rejections. This action is non-final.

4. In response to **Inoperability of the Cited Combination** presented on Page 12, the examiner disagrees.

Fukuchi discloses exactly the kind of prior art scanner/printer apparatus taught by *Hideki* where there exists teaching, suggestion, and motivation to modify *Fukuchi* in the manner as taught by *Hideki*. Therefore, the teachings of *Hideki* as well as its, shaft, roller in place of *Fukuchi*'s original combination necessarily enables the operability of combination of *Fukuchi* as modified by *Hideki*.

In addition, the applicant's own admitted prior art states that the applicant's invention is an improvement over prior art's disadvantageous clam shell design (**the design of *Fukuchi***) by making it slidable. If the applicant's argument is given weight, then it can be conversely argued that the applicant's invention is also inoperable because it is made in view of the problem described in applicant's admitted prior art, which is an apparatus with similar clam shell configuration and therefore with the same problem as *Fukuchi* from which *Hideki* seeks to improve upon.

In other words, had *Hideki* not suggest that it is the intent of its invention to modify the apparatus of *Fukuchi*, the examiner would agree with applicant's assessment.

5. In response to **Improper Hindsight**:

It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

That is, when the applicant's prime inventive step of a sliding scanner bed relative to a printer portion is anticipated by *Hideki* for the same reason and purpose, the feature of making a slidable scanner bed relative to a printer portion is no longer the sole teaching of the applicant. Therefore, the combination made is not made under the knowledge gleaned only from applicant's disclosure but from the disclosure of *Hideki*.

Furthermore, how the applicant goes about sliding said scanner bed relative to the printer portion would be consider obvious if a prior art teaches similar sliding mechanism and equivalent structure for performing the same functions as applicant's claimed structure since it is evidence that it is within the knowledge of one of ordinary skill in the art without gleaned only from the applicant's disclosure. Said prior art being *Goshima* because it teaches a sliding mechanism for moving an original carriage along a base housing horizontally. That is, given the manual labor required by *Hideki*'s biasing or sliding mechanism, an advantage of *Goshima*'s mechanism provides an automated moving mechanism that would spare a user the burden of manual labor to move one section relative to another section, be it an original carriage relative to printer/scanner base housing or scanner bed relative to a printer base housing.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2-17, 22-23, 26-34, 36-41, and 43-48 are rejected under 35 USC 103 (a) as being unpatentable over *Fukuchi et al (US 5126789 A)* in view of *Hideki (JP 09-189972 A)* and *Goshima et al. (US 4192608 A)*, *Cheng (US 6373601 B1)*.

Regarding Claims 1 and 9, *Fukuchi* discloses a multi-function peripheral, comprising:

- a base housing (*Fukuchi*, Fig 31, Image Forming Apparatus Body 10);
- a scanner bed positioned on said base housing (*Fukuchi*, Fig 31, image reading unit 60 and see Col 35, Rows 1-10);
- said scanner bed being open or close between a first position and a second position (*Fukuchi*, Fig 31, see the dotted arrow and see Col 35, Rows 11-18), said second position revealing a cartridge changing station within said base housing (*Fukuchi*, Fig 31, Col 35, Rows 11-18).

Fukuchi does not disclose said scanner bed being slidably positioned on said base housing.

Hideki discloses a multi-function peripheral, comprising:

- a base housing (*Hideki*, Drawing 1, Fixed Printer Section 2 and see Paragraph 0010);
- a scanner bed (*Hideki*, Drawing 1, Migration Scanner Section 1 and see Paragraph 0010) slidably positioned on said base housing (see Drawing 1); and,

said scanner bed being slidable between a first position (*Hideki*, **Drawing 4, Close Position**) and a second position (*Hideki*, **Drawing 1, Open Position**).

a biasing mechanism interposed between said base housing and said scanner bed (*Hideki*, **Drawing 2 (b), Rollers 5, Roller Shafts 6, and rails 7 and see Paragraph 0014**) for biasing said scanner bed to one of an open position or a closed position (*Hideki*, **Drawing 1**).

Hideki suggested the disadvantage of the clam shell design employed by *Fukuchi* necessitates additional dampening mechanism that increases cost (*Hideki*, **Paragraph 4 and 5**) and it proposes to solve this problem by having a sliding configuration in which the scanner section slides relative to the printer section (*Hideki*, **Paragraph 6**). Therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Fukuchi* in the configuration suggested by *Hideki* in order to reduce cost (*Hideki*, **Paragraph 18**).

The combined teachings do not teach the mechanical components for the implementation of having one part of the apparatus move slidably relative to the base housing of the apparatus.

Goshima, in the same field of endeavor of image processing apparatus with slidably moving sub-components, discloses a slidably moving original carrier (*Goshima*, **Col 10, Rows 34-52**) as well as the mechanical components to implement such slidable movement (*Goshima*, **Fig 47, Solenoid 631, Col 30, Rows 62-68**) with an electric motor (*Goshima*, **Col 30, Rows 1-12, Motor M**);

wherein a base housing (*Goshima*, Fig 3, Apparatus Housing 25) is provided with biasing mechanism being springs disposed within the original carriage (*Goshima*, Fig 44, Spring 613) to facilitate the movement of the original carriage relative to the base housing.

Under the KSR doctrine of applying a known device ready for improvement to yield predictable result, *Goshima* teaches a well known technique that is applied to move an original carriage along a base housing analogous to *Hideki*'s movement of scanner bed along the printer portion. One of ordinary skill in the art would clearly recognized the configuration of *Goshima* would present a viable alternative for modifying *Hideki*'s structure of moving a scanner bed relative to a printer portion requiring manual labor into the auto-mechanical structure of *Goshima*'s moving original carriage along a base housing because such configuration performs exactly the same function of *Hideki*'s moving scanner bed and at the same time spares an user from the burden of manual labor. Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the slidable configuration of *Hideki*'s scanner bed relative to printer portion with the auto-mechanical structure of *Goshima* including a biasing mechanism in the form of springs in the manner of *Goshima*'s original carriage relative to base housing containing printer portion in order to provide slidably move the scanner portion from one open position to a close position without manual labor thus sparing users from any physical inconveniences as well as to provide a buffer for the original carriage (*Goshima*, Col 30, Rows 24-25).

Fukuchi as modified by *Hideki* and *Goshima* does not disclose a scammer lid hingedly attached to said scanner bed of dependent Claim 10.

Cheng discloses a conventional scanner with a scanner lid hingedly attached to said scanner bed (*Cheng, Fig 1, a traditional flatbed scanner with a lid 10*).

Under the KSR doctrine, applying a known technique or known configuration such as a lid hingedly attached to a scanner bed taught by *Chen* to the scanner bed of the combined teachings would yield a predictable result instantly recognizable by one of ordinary skill in the art by the fact that a traditional scanner apparatus is known to comprise a scanner lid hingedly attached to said scanner bed. If this configuration was good for prior apparatus before the filing date of instant application, said configuration is good for *Fukuchi* as modified by *Hideki* in view of the mechanical configuration provided by *Goshima*. Therefore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the scanner bed with a pivoting scanner lid to ensure ease of opening and closing a scanner exposure portion.

Regarding Claim 3, *Hideki* of the combined teachings disclose the multi-function peripheral further comprising rails depending from said scanner bed (**Drawing 2, rails 7 and see Paragraph 0014**).

Regarding Claim 4, *Hideki* of the combined teachings disclose the multi-function peripheral further comprising tracks extending through said base and slidably engaging said rails (**Drawing 2 (b), roller shafts 6 slidably engaging rail 7 via rollers 5 and see Paragraph 0014**).

Regarding Claim 5, *Hideki* of the combined teachings disclose the multi-function peripheral further comprising said base housing having a cover with at least one rail

extending from said cover (See **Drawing 1 and Drawing 2, the cover of fixed Printer Section 2 act as physical support for the rollers, roller shafts, and the rails**).

Regarding Claim 6, *Hideki* of the combined teachings disclose the multi-function peripheral further comprising at least one track positioned in a lower surface of said scanner bed and slidably receiving said at least one rail (**Drawing 2 (b), and see Paragraph 0014, tracks/roller shaft 6 slidably receives rails 7 via Roller 5**).

Regarding Claim 7, *Hideki* of the combined teachings disclose the multi-function peripheral further comprising said slidable scanner bed being moveable between a first closed position (**Drawing 4, closed position**) and a second open position (**Drawing 1, opened position**).

Regarding Claim 8, *Goshima* of combined teachings disclose a slidably moving original carrier, discloses an open position (**Fig 15, the position where original carrier is slidably moved into an open position as illustrated in Fig 1, with the cover removed**) revealing a cartridge changing station within a base housing (**Fig 15, and see Col 17 Rows 36- Col 18, Rows 42, specifically Col 18, Rows 21-42**).

Regarding Claim 9, *Hideki* disclose the multi-function peripheral further comprising said scanner bed being horizontally slidable along said base housing (**Drawing 1 and see Paragraph 0010, “B shows the closing motion direction slid in a longitudinal direction on either side”**).

Regarding Claim 11,

Fukuchi discloses a multi-function peripheral, comprising:

a base housing (*Fukuchi*, **Fig 31, Image Forming Apparatus Body 10**);

a scanner bed positioned on said base housing (*Fukuchi*, **Fig 31, image reading unit 60 and see Col 35, Rows 1-10**);

said scanner bed being open or close between a first position and a second position (*Fukuchi*, **Fig 31, see the dotted arrow and see Col 35, Rows 11-18**), said second position revealing a cartridge changing station within said base housing (*Fukuchi*, **Fig 31, Col 35, Rows 11-18**) wherein the cartridge changing station is made accessible by a user upon actuation of said interface device (*Fukuchi*, **Fig 31, Col 35, Rows 11-18**).

Fukuchi does not disclose said scanner bed being slidably positioned on said base housing.

Hideki disclose a slidable scanner bed for an image recording apparatus, comprising:

a base housing (*Hideki*, **Drawing 1, Fixed Printer Section 2 and see Paragraph 0010**);

a sliding mechanism connecting said base housing to a slidable scanner bed (*Hideki*, **Drawing 2 (b), Paragraph 0014, Rollers 5**); and

an interface device interposed between said base housing and said scanner bed to one of allow or prevent travel of said scanner bed (*Hideki*, **Drawing 2 (b), Paragraph 0014, Roller Shaft 6**);

a cartridge changing station disposed within said base housing and beneath said sliding mechanism (*Hideki*, **Drawing 1 and see paragraph 10, printer section 2 must inherently have a cartridge changing station disposed within in order to have the ink to**

print materials and since the entire printer section is beneath the sliding mechanism, whatever inside of the printer section is also beneath the sliding mechanism);

said slidable scanner bed movable from a first position wherein a cartridge changing station is hidden by said slidable scanner bed (*Hideki, Drawing 4, one can not see the cartridge changing station*) to a second position where the printer section is made accessible by a user upon actuation of said interface device (*Hideki, Drawing 1*).

Hideki suggested the disadvantage of the clam shell design employed by *Fukuchi* necessitates additional dampening mechanism that increases cost (*Hideki, Paragraph 4 and 5*) and it proposes to solve this problem by having a sliding configuration in which the scanner section slides relative to the printer section (*Hideki, Paragraph 6*). Therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Fukuchi* in the configuration suggested by *Hideki* in order to reduce cost (*Hideki, Paragraph 18*).

The combined teachings do not teach the mechanical components for the implementation of having one part of the apparatus move slidably relative to the base housing of the apparatus.

Goshima, in the same field of endeavor of image processing apparatus with slidably moving sub-components, discloses a slidably moving original carrier (*Goshima, Col 10, Rows 34-52*) as well as the mechanical components to implement such slidable movement (*Goshima, Fig 47, Solenoid 631, Col 30, Rows 62-68*);

wherein a base housing (*Goshima*, Fig 3, Apparatus Housing 25) is provided with biasing mechanism being springs disposed within the original carriage (*Goshima*, Fig 44, Spring 613) to facilitate the movement of the original carriage relative to the base housing.

Under the KSR doctrine of applying a known device ready for improvement to yield predictable result, *Goshima* teaches a well known technique that is applied to move an original carriage along a base housing analogous to *Hideki*'s movement of scanner bed along the printer portion. One of ordinary skill in the art would clearly recognized the configuration of *Goshima* would present a viable alternative for implementing *Hideki*'s structure of moving a scanner bed relative to a printer portion in the manner of *Goshima*'s moving original carriage along a base housing because such configuration performs exactly the same function of *Hideki*'s moving scanner bed. Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the slidable configuration of *Hideki*'s scanner bed relative to printer portion with a biasing mechanism in the form of springs in the manner of *Goshima*'s original carriage relative to base housing containing printer portion in order to provide slidably move the scanner portion from one open position to a close position without manual labor, thus sparing users from any physical inconveniences.

Regarding Claim 12, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said sliding mechanism having at least one rail depending from said scanner bed (**Drawing 2, rails 7 and see Paragraph 0014**).

Regarding Claim 13, *Hideki* of the combined teachings disclose the slidable scanner bed wherein said sliding mechanism further comprises at least one track in said base housing

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slidably receiving said at least one rail (**Drawing 2 (b), and see Paragraph 0014, tracks/roller shaft 6 slidably receives rails 7 via Rollers 5).**

Regarding Claim 14, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said at least one rail (Drawing 2, rails 7 and see Paragraph 0014) and said at least one track (Drawing 2 (b), roller shafts 6 and see Paragraph 0014) each having at least one interfacing angled surface inhibiting vertical disengagement of said slidable scanner bed from said base housing (Paragraph 0018, the object of the invention is to eliminate the need of “fall from the upper part in the breaker style of the vertical direction” of conventional scanner + printer multi-functional peripheral apparatus).

Regarding Claim 15, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising at least one rail extending from said base housing and at least one track located within a lower surface of said scanner bed (Drawing 2 and see Paragraph 0014, rail 7 extending from Printer Section 2 and Roller Shafts 6 located within a lower surface of Scanner Section 1).

Regarding Claim 16, *Hideki* of the combined teachings disclose the slidable scanner bed wherein said sliding mechanism further comprises at least one guide shaft extending within said base housing (Paragraph 0014, Roller Shaft 6 acts as both track and the shaft that guides the rollers in either the forward or reverse direction when the scanner section starts to slide).

Regarding Claim 17, *Hideki* of the combined teachings discloses the slidable scanner bed further comprising said scanner bed having at least one bearing surface receiving said guide shaft (**See Drawing 1**).

Regarding Claim 22, *Goshima* of the combined teachings disclose a cover extending across an upper opening in a base housing (**Fig 1, Cover is on. Fig 15, Cover is off. Fig 2, Cover with Original Carriage Guidance Rail 2 and 3 contain there upon that covers the Development Portion from exposure**).

Hideki and *Goshima* both disclose an apparatus with a scanner portion and a printer portion contained in a base housing.

It would've been obvious to one of ordinary skill in the art at the time of the invention incorporate the structure of *Goshima* for the design of the printer portion contained within a base housing of *Hideki*, to include a cover extending across an upper opening in said base housing whereas the motivation would've been to enable insulate the internal components of the printer section from exposure.

Regarding Claim 23, *Goshima* of the combined teachings disclose a cover having a window therein (**Fig 15, a window that provides an opening for reaching inside**).

Regarding Claim 26, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said scanner bed having a biasing mechanism interposed between said scanner bed and said base housing (**Drawing 2 (b), Rollers 5, Roller Shafts 6, and rails 7 and see Paragraph 0014, Goshima discloses biasing mechanism being springs, Fig 44, Spring 613**).

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Regarding Claim 27, *Goshima* of the combined teachings disclose a base housing (**Fig 3, Apparatus Housing 25**) with biasing mechanism being springs disposed within the original carriage (**Fig 44, Spring 613**) and a pocket (**Fig 1, see the pocket between track 2 and 3**).

While *Goshima* does not disclose the pocket contain the springs therein, this configuration does not provide any functional advantage over *Goshima*'s placement of springs from which one of ordinary skill in the art would've expected *Goshima*'s spring configuration to work equally well. This claimed structure appears to be engineering design choice. Therefore, it would've been obvious to one of ordinary skill in the art to disposed the biasing springs within said pocket and incorporate such arrangement of spring-within-pocket into the device of *Hideki* so that the scanner section would be slidably moved from open position to close position or vice versa.

Regarding Claim 28, *Fukuchi* discloses a multi-function peripheral, comprising:
a base housing (**Fig 31, Image Forming Apparatus Body 10**);
a scanner bed positioned on said base housing (**Fig 31, image reading unit 60 and see Col 35, Rows 1-10**);

said scanner bed being open or close between a first position and a second position (**Fig 31, see the dotted arrow and see Col 35, Rows 11-18**), said second position revealing a cartridge changing station within said base housing (**Fig 31, Col 35, Rows 11-18**).

Fukuchi does not disclose said scanner bed being slidably positioned on said base housing.

Hideki discloses a slidable scanner bed for a multi-function peripheral, comprising:

- a base housing (**Drawing 1, Fixed Printer Section 2 and see Paragraph 0010**);
- a scanner bed slidably connected to said base housing (**Drawing 1**);
- an interface device releasing said scanner bed from a locked position (**Drawing 2, and see Paragraph 0014, roller shafts with rollers attached**); and,
- a printing component positioned internally of said base housing (**Paragraph 0010, Printer Section 2 contains all the printing components for executing printing process**).

a biasing mechanism disposed between said base housing and said scanner bed (**Drawing 2 (b), Rollers 5, Roller Shafts 6, and rails 7 and see Paragraph 0014**) for biasing said scanner bed from one of a first position and a second position to the other of said first position and said second position upon actuation of said interface device (**Drawings 1-4**).

Hideki suggested the disadvantage of the clam shell design employed by *Fukuchi* necessitates additional dampening mechanism that increases cost (*Hideki, Paragraph 4 and 5*) and it proposes to solve this problem by having a sliding configuration in which the scanner section slides relative to the printer section (*Hideki, Paragraph 6*). Therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of *Fukuchi* in the configuration suggested by *Hideki* in order to reduce cost (*Hideki, Paragraph 18*).

The combined teachings do not teach the mechanical components for the implementation of having one part of the apparatus move slidably relative to the base housing of the apparatus.

Goshima, in the same field of endeavor of image processing apparatus with slidably moving sub-components, discloses a slidably moving original carrier (**Col 10, Rows 34-52**) as well as the mechanical components to implement such slidable movement (**Fig 47, Solenoid 631, Col 30, Rows 62-68**);

wherein a base housing (**Fig 3, Apparatus Housing 25**) is provided with biasing mechanism being springs disposed within the original carriage (**Fig 44, Spring 613**) to facilitate the movement of the original carriage relative to the base housing.

Under the KSR doctrine of applying a known device ready for improvement to yield predictable result, **Goshima** teaches a well known technique that is applied to move an original carriage along a base housing analogous to **Hideki**'s movement of scanner bed along the printer portion. One of ordinary skill in the art would clearly recognized the configuration of **Goshima** would present a viable alternative for implementing **Hideki**'s structure of moving a scanner bed relative to a printer portion in the manner of **Goshima**'s moving original carriage along a base housing because such configuration performs exactly the same function of **Hideki**'s moving scanner bed. Therefore, it would've been obvious to one of ordinary skill in the art at the time of the invention to modify the slidable configuration of **Hideki**'s scanner bed relative to printer portion with a biasing mechanism in the form of springs in the manner of **Goshima**'s original carriage relative to base housing containing printer portion in order to provide slidably move the scanner portion from one open position

to a close position without manual labor, thus sparing users from any physical inconveniences.

The combined teachings do not disclose the multi-function peripheral further comprising a scanner lid hingedly attached to said scanner bed.

Cheng discloses a conventional scanner with a scanner lid hingedly attached to said scanner bed (**Fig 1, a traditional flatbed scanner with a lid 10**).

Under the KSR doctrine, applying a known technique or known configuration such as a lid hingedly attached to a scanner bed taught by *Chen* to the scanner bed of the combined teachings would yield a predictable result instantly recognizable by one of ordinary skill in the art by the mere fact that a traditional scanner apparatus is known to comprise a scanner lid hingedly attached to said scanner bed. If this configuration was good for prior apparatus before the filing date of instant application, said configuration is good for *Fukuchi* as modified by *Hideki* in view of the mechanical configuration provided by *Goshima*.

Regarding Claim 29, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising at least one rail depending from said scanner bed (Drawing 2, rails 7 and see Paragraph 0014**) slidably engaging at least one track molded in said base housing (rails 7 are engaging the roller shaft 6 via rollers 5).**

Regarding Claim 30, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said at least one rail being first (Drawing 2, Rail 7a**) and second rails (**Drawing 2, Rail 7b**) and said at least one track being corresponding first (**Drawing 2,****

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Roller Shafter 6a + Roller 5a) and second tracks (Drawing 2, Roller Shafter 6a + Roller 5a and Paragraph 0014).

Regarding Claim 31, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said first and second rails depending from said scanner bed (See Drawing 2a, both rails are depending from Scanner Section 1).

Regarding Claim 32, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising at least one rail extending from said base housing and slidably engaging at least one track formed in a lower surface of said scanner bed (Drawing 2 (b) and see Paragraph 0014, rail 7a extending from Printer Section 2 and slidably engages roller shaft 6a via roller 5a).

Regarding Claim 33, *Goshima* of the combined teachings disclose a housing cover (Fig 1, Cover is on. Fig 15, Cover is off) on a base housing (Fig 3, Apparatus Housing 25) having a window revealing a cartridge changing station of said printer component (Fig 2, Cover with Original Carriage Guidance Rail 2 and 3 contain there upon that covers the Development Portion from exposure).

Regarding Claim 34, *Goshima* of the combined teachings disclose said housing cover (Fig 44) having a slide lock comprising a tab and a tapered catch, said slide lock retaining said scanner bed in a closed position (Col 30, Rows 13-30).

Regarding Claim 36, *Goshima* of the combined teachings disclose a base housing (Fig 3, Apparatus Housing 25) with biasing mechanism being springs disposed within the

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original carriage (**Fig 44, Spring 613**) and a pocket (**Fig 1, see the pocket between track 2 and 3**).

While *Goshima* does not disclose the pocket contain the springs therein, it would've been obvious to one of ordinary skill in the art to disposed the biasing springs within a pocket and incorporate such arrangement of spring-within-pocket into the device of *Hideki* so that the scanner section would be slidably moved from open position to close position or vice versa.

Regarding Claim 37, *Goshima* of the combined teachings disclose an original carriage having a clip depending therefrom for engaging said biasing spring (Fig 44, Engagement Member 612 and see Col 30, Rows 20-25).

Regarding Claim 38, *Hideki* of the combined teachings disclose said base housing having posts therein and guide shafts positioned between said posts (Drawing 2, the post is the bar that provides a fulcrum or support a Roller Shafts 6).

Regarding Claim 39, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising bearing members depending from said scanner bed and slidably engaging said guide shafts (Drawing 2 (b), the horizontally oval bearing members for slidably engaging roller shafts 6).

Regarding Claim 40, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising a sliding mechanism defined by vertical walls (Drawing 2a, roller 5 + roller shaft 6 and rail 7) extending from an upper portion of said base housing along a

front edge (**Drawing 2a, for example front edge being edge that roller shaft 6c is attached to**) and a rear edge (**rear edge being where roller shaft 6a is attached to**).

Regarding Claim 41, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said front edge and said second edge being substantially parallel (Drawing 2a, the vertical edges are parallel to each other).

Regarding Claims 43-47, *Hideki* does not explicitly disclose a mechanical method in which the scanner bed is moved from one position to the other and a push-button actuated electromagnetic latch.

***Goshima* discloses the following**

a push-button actuated electric solenoid (**Fig 47, Solenoid 631, Col 30, Rows 62-68**) releases a biasing force to move said scanner bed upon actuation of said electric solenoid (**Col 31, Rows 1-12, once the lock is removed, the biasing force generated by Motor M allows the original carriage to attain a designated velocity**) ;

a motorized opening mechanism (**Col 30, Rows 1-12, Motor M**) and

an electrical push-button (**Col 30, Rows 1-12, Copy Button**), said electrical push-button actuating said motorized opening mechanism (**Col 30, Rows 1-12**) and

a push-button actuated electromagnetic latch releases a biasing force to move said scanner bed upon actuation of said electromagnetic latch (**Fig 45 and see Col 30, Rows 26-60, which performs the functional and structural equivalent of a latch and which is electro-magnetic in nature. And see Col 31, Rows 1-12**)

an original carriage being actuated by a motor (**Col 30, Rows 1-5**);

an actuatable electromagnet (**Fig 47, Solenoid 631, Col 30, Rows 62-68**) for moving an original carrier from a first position to a second position (**Col 30, Rows 1-12**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate a motorized mechanism of *Goshima* into the apparatus of *Fukuchi* as modified by *Hideki* in order to slidably move the scanner portion from one open position to a close position without manual labor, thus sparing users from any physical inconveniences.

Regarding Claim 48, *Hideki* of the combined teachings disclose the slidable scanner bed further comprising said scanner bed being manually slidably operated between open and closed positions (**Paragraph 0008, roller section which is a means to perform slide closing motion**).

8. Claims 24-25 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *Fukuchi et al (US 5126789 A)*, *Hideki (JP 09-189972 A)*, *Goshima et al. (US 4192608 A)* and *Cheng (US 6373601 B1)* in view of what is well known in the art.

Regarding Claims 24 and 25, *Hideki* does not disclose where said base housing further comprises a cover with said cover including at least one snap hook and a button engaging said snap hook.

Goshima discloses base housing further comprises a cover (**Fig 2, Cover with Original Carriage Guidance Rail 2 and 3 contain there upon that covers the Development Portion from exposure**).

However, it is well known to one of ordinary skill in the art to employ a snap hook engaged to a button for locking and unlocking a mechanism in position (**Official Notice**).

Therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to employ snap hook engaged to a button so as to enable a user to manually open and closing a cover that shields internal components of printer portion from exposure.

9. Claim 18 is rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *Fukuchi et al (US 5126789 A)*, *Hideki (JP 09-189972 A)*, *Goshima et al. (US 4192608 A)*, *Cheng (US 6373601 B1)* in view of *Johnson et al. (US 5791792 A)*.

Regarding Claim 18, *Hideki* discloses the slidable scanner bed (Drawing 1, Scanner Section 1 and see paragraph 0010) with interface device (Drawing 2, and see Paragraph 0014, roller shafts with rollers attached).

Hideki does not disclose wherein said interface device further comprises a button extending through said scanner bed.

Johnson discloses a button build onto an interface depressible by a person with the purpose of locking an internal component of a typewriter in position so that a process may be performed (**Col 7, Rows 14-24**).

Hideki and *Johnson* both disclose printing apparatus or peripheral device with moving internal components.

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate a button, for the purpose of locking a moving component in position as

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suggested by *Johnson*, into the combined apparatus of *Hideki* and *Goshima* whereas the motivation would've been to lock the scanner bed in either open position or close position.

10. Claims 19-20 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *Fukuchi et al (US 5126789 A)*, *Hideki (JP 09-189972 A)*, *Cheng (US 6373601 B1)*, *Goshima et al. (US 4192608 A)* and *Johnson et al. (US 5791792 A)* in view of *Wakabayashi et al. (US 5659459 A)*.

Regarding Claim 19 and 20, *Johnson* does not explicitly disclose a button having a first tapered engagement surface at an end of said button adjacent said base housing and a second tapered engagement surface.

Wakabayashi discloses an interface device (Fig 2, cartridge 503 and see Col 10, Rows 1-14, with buttons accessible to a person for locking and unlocking a cover to reveal the components insulated inside) comprising a first tapered engagement surface at an end of said button adjacent a base housing of the cartridge and a second tapered engagement surface (Col 12, Rows 32-41, one button provided at each side of the upper cap 150, which must be remove to reveal the internal components).

Wakabayashi demonstrated a concept that is notoriously well known to one of ordinary skill in the art to have locks on a first tapered engagement surface at one side of a cover (in *Hideki's* case, the scanner bed) and a second tapered engagement surface at the opposite side of the cover as well as button for locking and locking the cover in place.

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate a button having a first tapered engagement surface at an end of said button

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adjacent said base housing and a second tapered engagement surface, for the purpose of locking a moving component in position as suggested by *Johnson*, into *Hideki* and *Goshima* whereas the motivation would've been to lock the scanner bed in either open position or close position to either insulate the internal components of printer section from exposure or to expose the internal components long enough for a person to change the developing device or cartridge.

11. Claim 42 is rejected under 35 USC 103 (a) as being unpatentable over *Fukuchi et al (US 5126789 A)*, *Hideki (JP 09-189972 A)*, *Goshima et al. (US 4192608 A)*, *Cheng (US 6373601 B1)* in view of *Watanabe (US 4779141 A)*.

Regarding Claim 42, *Hideki* does not disclose a spring-loaded button.

Watanabe discloses a spring loaded button for locking and unlocking a cover of an illumination device (**Fig 4 and see Col 7, Rows 31-44**) in which the cover moves in a slidable manner (**Col 7, Rows 45-56**).

Therefore it would've been obvious to one of ordinary skill in the art at the time of the invention to have spring loaded button so as to enable the user to press it down to lock the scanner portion in a predetermined position and press it up to unlock the scanner portion from a predetermined portion.

12. Claims 21 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *Fukuchi et al (US 5126789 A)*, *Hideki (JP 09-189972 A)*, *Goshima et al. (US 4192608 A)*, *Cheng (US 6373601 B1)*, *Johnson et al. (US 5791792 A)* in view of *Fuller (US 1753288 A)* and what is well known in the art.

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Regarding Claim 21, none of the references discloses a snap hook formed in said base housing cover for engaging said button at one of said engagement surfaces.

Fuller discloses a snap hook for locking a machine, in this case a cash register, in a position where normal operations are prevented (**Page 5, left column, Rows 5-31**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate a snap hook for engaging a button at one of its engagement surfaces, so as to prevent normal machine operation as suggested by **Fuller** whereas the motivation would've been to enable the maintenance of the machine's internal components by locking the scanner bed in open position and thus preventing normal operation from disturbing maintenance processes.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Richard Z. Zhu whose telephone number is 571-270-1587 or examiner's supervisor King Y. Poon whose telephone number is 571-272-7440. Examiner Richard Zhu can normally be reached on Monday through Thursday, 6:30 - 5:00.

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10/07/2008

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